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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,428	10/21/2003	William G. Bennett	50T5386.01	3828

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EXAMINER

WOODS, ERIC V

ART UNIT PAPER NUMBER

2672

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/690,428	BENNETT, WILLIAM G.	
	Examiner	Art Unit	
	Eric V Woods	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

Examiner accepts the specification, the abstract, and the title.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 5 contains elements 53, video scaler, and 54, user interface. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 1-5 and 12-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, the term "roughly approximate to" in claims 1 and 12 is a relative term that renders the claim indefinite. The term "roughly approximate to" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. That is, with the present wording it is impossible for examiner to tell how much image must be lost versus how much must be shown remaining on the screen, and what ranges would be proportionate. For example, it is well known in the art that when a 4:3 aspect ratio movie is converted to 16:9 or vice versa without any adjustment, twenty-five percent (25%) of the screen space comes to be occupied by blank space that is usually filled with black or gray. While the applicant does recite some numbers (e.g. in claim six a range of zero to twenty-five percent is provided) claims 1 and 12 do not have that range, and as such it is unknown what relative or absolute proportions would be necessary (e.g. an interpretation where twenty-five percent of the image was removed and the screen had twenty-five percent black area would be within the scope of the claim, thus rendering it obvious in light of any conversion mechanism between 4:3 and 16:9 aspect ratios).

Claims 2-5 and 13-16 are rejected as failing to correct the deficiencies of their parent claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al (US 5,912,710) in view of Jayne (Jayne, Jr., Allan W, "Wide Screen TV, Wide Screen Movies"). Claim 12 recites the apparatus, while claim 1 is a method directed to operation and/or use of an apparatus such as that of claim 12, or performing the process of the apparatus in a different manner. Therefore, a claim valid on one is equally valid on the other without further comment.

6. As to claims 1 and 12, Fujimoto teaches a DVD or media source 100 in Figure 1 that has a first aspect ratio (16:9) that is fed into the player 300 that takes the data, decodes it, and then passes it to a video scaler 107 that (6:15-30) controls the aspect ratio of the picture. That picture is then passed on to a monitor (computer monitor, television, et cetera) 200 that has a resolution different than that of the video (e.g. 4:3) (see for example 9:36-10:10) where such conversions are performed by the system of Fujimoto, and then sent to the monitor in question. Now, it is well known that computer monitors and television monitors have similar features. A typical television has controls to allow the user to change the vertical horizontal scale (size) of the picture, although they may require the use of a technician- or service-level menu to access them (Jayne pages 6-8, the Vsize control). (Such are well known on computer monitors -- A typical

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computer monitor – Apple (Apple Studio Display, “Display Adjustment Guidelines”, 2000 (see last page for copyright date) -- has adjustment controls for allowing the user to change the height and width of the picture (pages 6-7, Geometry button and height/width effects shown there, and the user’s ability to control them).) Now, Jayne shows on page 9 a diagram of various formats of TV and DVD formats based on the user’s preference (e.g. Full-frame, Letterbox, Anamorphic, Stretch, etc.) where the Zoom or Expanded version are chopped off just as if pan-and-scan is used to view a movie (page 9). Now, clearly, a certain portion of the screen would be present as black bars in such circumstances, and that percentage – in straight conversion from 16:9 to 4:3 happens to be twenty-five percent (geometric ratio, see for example MacLeod (US 5,825,427) col. 2, lines 5-15). However, it is well known in the art to allow the user to adjust this percentage by tweaking the vertical height and width of the picture (from both Apple and Jayne).

Applicant is reminded of *In re Venner* -- 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958)(see MPEP 2144.04, section III), where it was held that automating a manual activity was not patentable (and the converse has also been held to be true, where making an automatic activity adjustable is not per se patentable).

In light of both *Venner* and the above references, it would obvious to modify the scaler 107 of Fujimoto to be manually controllable so that the user could set the desired exact widths and heights, which would allow the user to adjust the area of the black bars.

Finally, such a system would indeed provide for allowing the user to adjust the image so that the amount of image cropped in pan-and-scan mode (see page 9 of Jayne) in a case where the movie could have an aspect ratio greater than 16:9 (e.g. 1.85 to or greater, as stated by Jayne on page 2. Obviously, in that case on a 4:3 display some of the edges would be cropped (page 3, history of types of video, discusses pan and scan mode, and on page 11 it teaches how the DVD player can do a Auto Pan and Scan or cropped mode, which provides additional proof that the scaling unit of the DVD player of Fujimoto would obviously have such capabilities. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the system of Fujimoto with Jayne, since Jayne teaches different display modes, aspect ratios, and other capabilities that would clearly enable the system of Fujimoto to display more formats of video without having all of the movie cropped off the screen automatically.

7. As to claims 2-5 and 13-16, Fujimoto clearly teaches that the TV (e.g. the aspect ratio of the display) can be either 4:3 or 16:9 in Fig. 1, element 200. The input aspect ratio can be 16:9 or 4:3 from the DVD (see Fig. 15) (3:35-45 and 3:65-6:6). Therefore, the first aspect ratio can be either 4:3 or 16:9 and the second aspect ratio can be either 4:3 or 16:9, thus meeting the limitations of all five claims.

8. Claims 6-11 and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto in view of Jayne and Apple. Claim 17 recites the apparatus, while claim 6 is a method directed to operation and/or use of an apparatus such as that

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of claim 17, or performing the process of the apparatus in a different manner.

Therefore, a claim valid on one is equally valid on the other without further comment.

The rejection to claim 1 is hereby incorporated by reference in its entirety.

9. As to claims 6 and 17, these claims are substantially similar to those of claim 1.

The only difference is that the limitation is that the user adjusts the amount of an image that is lost, and in claim 12 that the user enters a value via a graphical user interface.

Clearly, Apple teaches a graphical user interface as discussed above (pages 6-7, Geometry button and height/width effects shown there, and the user's ability to control them) for adjusting the size of the display. As set forth above in the rejection to claim 1 above, the other limitations are met and motivation is taken from claim 1.

10. As to claim 7, this is a trivially obvious variant. Clearly, Jayne teaches that a user can use the Expand video mode so that an image can be distorted and/or Stretched to fill the entire screen, which would constitute approximately zero loss, and practically the system of a CRT would have a limit to how much the system could broaden or narrow the picture, where that practical limit would form a maximum. Further, there is a practical maximum on the area lost, where it is known a maximum of 25% of the area is unused if 4:3 is scaled to a 16:9 monitor, and if a wider aspect ratio (Jayne) is used, the user would be able to change the amount of area lost up to the maximum broadening allowed by the display.

11. Claims 8-11 and 18-21 are exactly the same as claims 2-5, and the rejection to those claims is herein incorporated by reference.

12. Claims 1, 6, 12, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacLeod (US 5,825,427) in view of Jayne and Apple.

13. As to claims 1 and 12, a typical television has controls to allow the user to change the vertical horizontal scale (size) of the picture, although they may require the use of a technician- or service-level menu to access them (Jayne pages 6-8, the Vsize control). (Such are well known on computer monitors -- A typical computer monitor -- Apple -- has adjustment controls for allowing the user to change the height and width of the picture (pages 6-7, Geometry button and height/width effects shown there, and the user's ability to control them).)

The existence of MacLeod conclusively proves that the problem of the screen not adequately displaying two different aspect resolutions has been considered, in light of the various modes of operation (Letterbox, Stretch, Zoom, etc.) that were shown in Jayne. MacLeod teaches a display with an ideal aspect ratio that is the geometric mean between 4:3 and 16:9, which MacLeod teaches cuts the unused area of the screen to 13.4%, not including any overscan (5:2-5:14) where MacLeod also teaches that with overscan, and/or the use of prior art systems that clip and distort the image (5:40-50) that any border areas can be eliminated. Clearly, the stretch-operating mode (and allowing the user to adjust the actual width and height of the picture) constitutes "prior art systems that distort the image". Therefore, MacLeod provides one prior art solution to the problem, but performs much of the correction of the image via hardware (actually changing the physical aspect ratio of the display), and teaches a correction that provides the same area minimization as applicant cites in the abstract of the instant

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application (e.g. 13%). The instant application merely performs a similar trick with software, which was already known – the user could adjust the display of Apple and Jayne as set forth above, and given that the scaler was manually operated or under manual control, obviously this would provide the solution stated by applicant, and it would have been obvious to modify the system of MacLeod to perform the scaling recited in Jayne and adjustments cited in Apple.

14. As to claims 6 and 17, the user as set forth above does the adjustments manually and that fulfills the limitations of the claims – Apple teaches a graphical user interface. Clearly, Apple teaches a graphical user interface as discussed above (pages 6-7, Geometry button and height/width effects shown there, and the user's ability to control them) for adjusting the size of the display. As set forth above in the rejection to claim 1 above, the other limitations are met and motivation is taken from claim 1.

Priority

15. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged. However, the provisional application upon which priority is claimed fails to provide adequate support under 35 U.S.C. 112 for claims 1-21 of this application. There is no support in the provisional whatsoever for the claimed inventions, the provisional is directed to methods of creating antennas or mixed input sources of digital television, there is a page of figures that show various types of TV display, but there is absolutely no documentation with it.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric V Woods whose telephone number is 571-272-7775. The examiner can normally be reached on M-F 7:30-4:30 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eric Woods


JEFFERY BRIEN
PRIMARY EXAMINER

May 5, 2005